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Update to the NARAC NNPP Non-Reactor Source Term Products

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Update to the NARAC NNPP Non-Reactor
Source Term Products

Recent updates to NARAC plots for NNPP requires a modification to your iClient database. The steps you need to take are described below.

Implementation of the non-reactor source terms in February 2009 included four plots, the traditional three instantaneous plots (1-3) and a new Gamma Dose Rate:

1. Particulate Air Concentration
2. Total Ground Deposition
3. Whole Body Inhalation Dose Rate (CEDE Rate)
4. Gamma Dose Rate

These plots were all initially implemented to be instantaneous output and generated 30 minutes after the release time.

Recently, Bettis and NAVSEA have requested the Whole Body CEDE rate plot to be changed to an integrated dose valid at two hours. This is consistent with the change made to the Thyroid Dose rate plot conversion to a 2-hour Integrated Thyroid dose for the Reactor and Criticality accidents.

In order to update the iClient software to account for the new Integrated Dose plot for the non-reactor scenarios please follow the two steps described below.

Important note: Only one account holder on the iClient at a particular site installation needs to follow these steps, all other account holders use the same database.

Step 1: Log on to your iClient.

Select the **Tools** pull down menu (see right) and select the "Update Management" option

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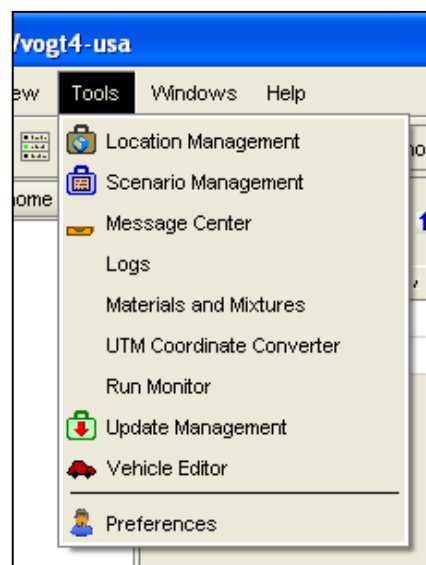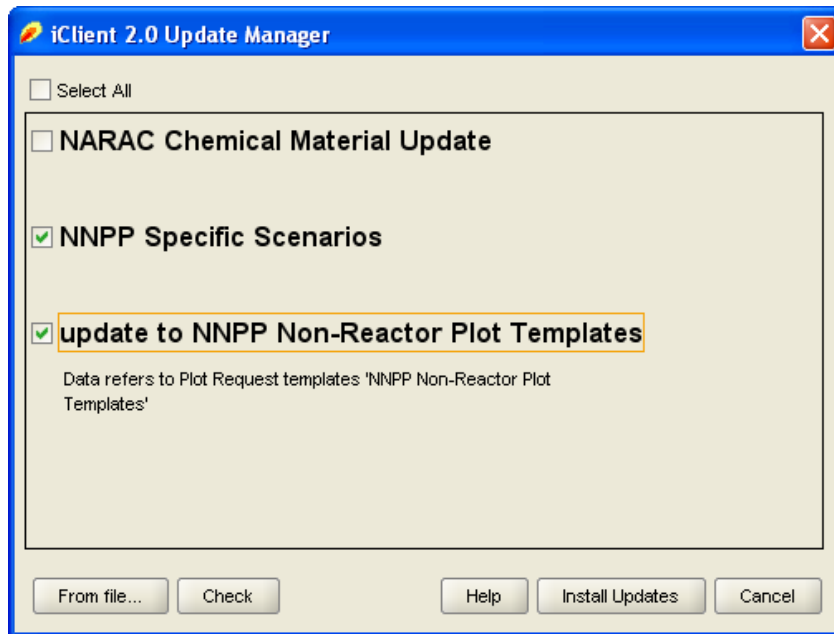
Step 2: Select the two updates (see Left):
1. NNPP Specific Scenarios
2. Update to NNPP Non-Reactor Plot Templates

Press the **Install Updates** button

Notes:
1. **Do not** select any **non NNPP** updates if you do not want to clutter up your scenario and material options with **non-NNPP** selections
2. There may be an Update to NNPP sites option. This update is for specific site release locations that were requested by some sites. You can upload this optionally**.**

The Table below summarizes the four non-reactor plots and contour values. This information supersedes slide #33 in the NARAC NNPP Training Presentation:

Plot Type	Contour Values	Units	Applicable Non Reactor Scenario
Whole-Body CEDE via Inhalation (Adult)	1.0, 0.1, 0.01, 0.001	rem	All non-Reactor Scenarios
Gamma Dose Rate	500, 50.0, 5.0, 0.5	mrem/hr	All non-Reactor Scenarios
Total Deposition*	1E+6, 1E+4, 1000, 450	pCi/100Cm^2	Corrosion Products and Mixed Fission
Total Deposition	5.0E+4, 5000, 500, 50	pCi/100Cm^2	New Fuel
Particulate Air Concentration*	1E+6, 1E+7, 1E+8, 1E+9	µCi/ml	Corrosion Products
Particulate Air Concentration	1E+7, 1E+8, 1E+9, 1E+10	µCi/ml	Mixed Fission
Particulate Air Concentration	1E+9, 1E+10, 1E+11, 1E+12	µCi/ml	New Fuel

* Default plots and contour values used for single-nuclide releases is the Corrosion Product set

One additional change in procedure for submitting a single nuclide run is to change the run time from 96 hours to 2 hours instead of from 96 hours to 30 minutes. (See memo dated May 7, Step 5)